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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION V

DATE: August 10, 1992  
 SUBJECT: QA Project Plan (QAPP) - Albion - Sheldon  
 FROM: Township Landfill, MI RI/FS  
 TO: David Atayne, Chief  
 LSSS, CR

George Schupp, Chief  
 QA Section

Affm? Ida Levin

This is a belated review of the QAPP for which you provided a review on June 19, 1992 to the Waste Management Division. We are only 2 months late for our review of the subject document. We do have comments on SOP's, SAS's, and ~~test procedures~~ parameters, and test procedures proposed for the subject RI/FS.

To Table 1 - Soil Boring

We see no rationale, or reasons, for TCLP testing and other RCRA characteristics. There are no SAS's prepared for these 5 parameters (TCLP through Flash Point). ~~We~~ We do not know if ~~Metals~~ Metals alone are to be tested for TCLP or if Vol, Semi Vol, Pest., Herb are also to be done. In Table I there is no reason to collect extra volumes of soils for MS/MSD's. They also have no meaning for RCRA characteristic (MS for pH?). The SAP & Work Plan provide no rationales for RCRA characteristics. If they are to be done only to characterize stored boring prior to disposal it would be cheaper to declare the boring hazardous than to test for RCRA characteristics.

## II. Leachate - Table II.

### Parameter Selections Comments

Liz?

A. ~~Alkalinity~~ Alkalinity should be done since this will complete characterization of groundwaters anions. Chloride and sulfate are being done - why not alkalinity also?

B. Metals are to be collected as filtered samples. (proposed) Leachate is "waste". If leachate can be p 2-6 collected as with few, or minimal, suspended solids, it may be better to determine metals on unfiltered, or both filtered and unfiltered samples.

C. Leachate is "funny stuff". It has a high organic content, but few TCL's. We will be lucky to get low concentration analyses without the background organics causing the sample to be tested as medium level anaerobic, full of carbonates, bicarbonates, sulfur, high alkalinity, will have trace target comp. in the presence of high background Dilute to the extent of background identity in advance to site scheduling lab's response.

We need to discuss leachate further. The OLC and ILC OI SOW's are not practical for leachates.

Total metals or dissolved

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### II.C. (cont.) Leachate

Not proposed  
this

- ✓ The SAS Low Level TCL's, Volatiles, or TAL's are not practical considerations. Leachates will have to be identified to CLP lab. We will be lucky if low conc. ~~of~~ of OLMO1 and ILMO1 SOW's can be obtained.

### III Table 6 - Ground Water

See footnote  
+ 4

- A. Why not alkalinity?

- B. The SAS TA's, Vol, or TAL's need to be discussed in more detail for Round 2. The receiving lab will have to know they are groundwaters, so proper screening can be done prior to analysis.

### IV Table 7 - Field Sampling Parameters

- We note trans 1,2 dichloroethene is specified. For the SP-1000 column in use, cis and trans 1,2 DCE can not be distinguished or resolved, so that, 1,2 DCE (total) will be determined. The cis isomer is the most prevalent in groundwater, cis 1,2 DCE must be considered in Table 7 and Field SOP. Can we change to total?

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I Tables 8 & 10 Surface Waters & Res. Wells,

A. Why not alkalinity?

II ~~SAS's~~ Cyanide

1. Throughout the Tables we note both filtered and unfiltered inorganics are to be collected. Should only unfiltered cyanide (part of inorganics) be collected? Is there a need for filtered cyanide?

Addressed in  
text. Pt 2-1<sup>a</sup> only  
unfiltered CN  
anywhere else  
(in tables)<sup>b</sup>  
No

III SAS's

A. A generic chloride SAS for is provided using the SAS with a det. limit of 0.5 mg/l chloride. We believe it more appropriate to use the SAS with a det. limit of 3-5 mg/l chloride. Is there a need for 0.5 mg/l det. limit? The 3-5 mg/l det. limit SAS provides more options ~~for analyses~~, is more cost effective, ~~etc~~ and will be easier to solicit.

more generic  
less sensitive  
easier to solicit  
Standard  
methods for  
chloride

Where 3  
detection  
limit noted?

Ask  
for it

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III

B No SAS's are provided for LCR & Characteristics (TCLP, corros., flash point). These SAS's will have to be written yet. We do have generic SAS's for TCLP, but not the other ~~parameters~~ characteristics. Before we embark on this exercise, a rational should be provided for the use of the LCR characteristics. OK

addressed

C. Throughout the Tables, we note MS/MSD's for parameters such as TDS, TSS, LCR characteristics, TOC in Soil, Oil & Grease, BOD, and CEC. These parameters do not have Matrix or use matrix spikes during their analyses. Please read the SAS's, and you will see that MS's are not done or required. These thoughts need to be clarified or corrected in the Tables and in corresponding parts of the QAPP and SAT.

Section 3  
for QAPP

MS/MSD samples will be collected as specified in the SAS Request form and Table -

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~~do we have any better ideas  
for soil analysis~~

VII  
~~TD~~ CEC

This SAS needs to be re written.

Firstly, we should review the test procedure specified from "Methods of Soil Analysis" in the SAS and compare it with ~~methods~~ SW-846 methods 9080 & 9081. All are different, but one is best for the soil types under study. Once the "best of" is selected, a new SAS should be written. The proposed SAS contains inappropriate details. The proposed SAS appears an appropriate choice.

IS QAS a revised QAPP provided by QAR, OK?

### ~~E. Res Well Organics & Metals~~

As noted in QA Section's previous review, the SAS's should be changed to the generic ones presently being solicited by the LSS section of the CRL. OK

### F. General Comment:

Numbers of samples are specified for both Round 1 and Round 2. The initial solicitation should only include samples for Round 1. Review of completed data will need to occur prior to specifications for Round 2.

# Fig 8

III

~~III~~ G. QAPP Table 5 - Bottles, Res,

Reg. Well  
Water

- Metals pres. ~~for~~ should be

5 mls of 50%  $HNO_3$  per liter <sup>Should change</sup>

to  $pH < 2$

2. ~~Hg~~ Hg

10 mls of 50%  $HNO_3$  and

5%  $K_2Cr_2O_7$  so

that final solution will  
be 0.5%  $HNO_3$  & 0.05%  $K_2Cr_2O_7$

~~Should change from guidance~~

3.

B. Oil & Gr.

~~Ferro~~ These should probably  
be collected in duplicate. Each

1 liter bottle is 1 determination.

If any repeats are done, an  
~~extra~~ additional bottle <sup>will change</sup> will  
be necessary. Any lab duplicate  
will require an extra bottle.

#. Parameter Description - O & G.

The term "oil and grease" is used throughout  
documents oil and grease (IR) or

oil and grease (spectrophotometric - IR) should  
be used instead; Oil & grease by itself implies  
a gravimetric measurement principle.

~~Don't change~~

Liz? how difficult  
to search? to change?

Dave - How important?  
change once that  
exp gain is lost  
exp 3+G well mean

Fig 888

III

## ~~SOP's~~ - Field Filtering of Waters for Metals

We have received the SOP's but find no SOP for field filtration of waters. This should be provided so we will and documented so we can determine metals will be filtered soon after collection (→) — within 15 to 20 minutes.

Can this  
be added?

C.C. C.T. Elly, CRL

J. Pels, CRL

M. Beth Novy, MT/MFTam, Rep, Br. ✓